

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
13 February 2003 (13.02.2003)

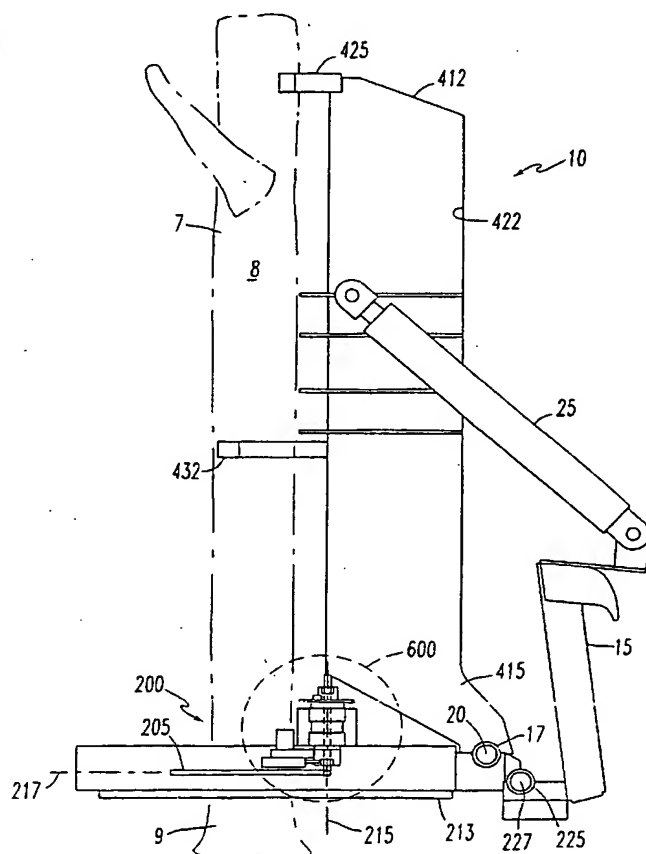
PCT

(10) International Publication Number
WO 03/011011 A3

- (51) International Patent Classification⁷: A01G 23/08
- (21) International Application Number: PCT/US02/24718
- (22) International Filing Date: 1 August 2002 (01.08.2002)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/309,357 1 August 2001 (01.08.2001) US
- (71) Applicant and
(72) Inventor: GUROSIK, John, O. [US/US]; 800 Brandy Camp Road, Kersey, PA 15846 (US).
- (72) Inventor; and
(75) Inventor/Applicant (for US only): LARGEY, Joseph, C. [US/US]; 257 Coal Hollow Road, Kersey, PA 15846 (US).
- (74) Agents: PREPELKA, Nathan, J. et al.; Webb Ziesenheim Logsdon Orkin & Hanson, P.C., 700 Koppers Building, 436 Seventh Avenue, Pittsburgh, PA 15219-1818 (US).
- (81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK (utility model), SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK,

[Continued on next page]

(54) Title: TREE HARVESTER ASSEMBLY



(57) Abstract: A tree harvester assembly (5) has a pivoting tower (10) which secures the trunk (7) of the tree (8) and may pivot to impart a bending moment upon the tree (8), thereby permitting easier cutting by a chain saw (205). The tree harvester (5) also has a pivot chain saw guide (200) which permits the harvester (5) to cut trees on a hillside at an orientation parallel to the terrain of the hillside at a low stump height. The tree harvester (5) also has clamping arms (405, 410) which may be selectively pivoted to secure a tree (8) against the tower (10) and to selectively release the tree (8) in one direction or another. A chain saw pivoting and drive apparatus (600) permits the chain saw (205) to be pivoted about a desired range and simultaneously driven to perform a cutting operation. Finally, the tree harvester assembly (5) includes a chain saw tensioning device (800) utilizing floating dovetails (810) urged apart by a spring element (805) which acts to urge the chain (612) of the chain saw (205) away from the drive sprocket (627), thereby tensioning the chain (612).

WO 03/011011 A3